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		PTO/SB/21 (09-0
, RET	Application Number	10/678,639
TRANSMITTAL	Filing Date	October 3, 2003
··· FORM	First Named Inventor	He, Biao
	Art Unit	1642
(to be used for all correspondence after initial fil	Examiner Name	Not yet assigned
Total Number of Pages in This Submission	Attorney Docket Number	02307O-125630US
	ENCLOSURES (Check all that	apply) After Allowance Communication to TC
Fee Transmittal Form Fee Attached Amendment/Reply After Final Affidavits/declaration(s) Extension of Time Request Express Abandonment Request Information Disclosure Statement with PTO/SB/08A and PTO/SB/08B Certified Copy of Priority Document(s) Reply to Missing Parts/ Incomplete Application Reply to Missing Parts under 37 CFR 1.52 or 1.53	Drawing(s) Licensing-related Papers Petition Petition to Convert to a Provisional Application Power of Attorney, Revocation Change of Correspondence Address Terminal Disclaimer Request for Refund CD, Number of CD(s) Landscape Table on CD Remarks The Commissioner is at Account 20-1430.	Appeal Communication to Board of Appeals and Interferences Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) Proprietary Information
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Firm Name Townsend and Town	, // //	
Signature	$\bigwedge_{\mathcal{L}} \mathcal{N}^{\mathcal{U}}$	
Printed name Jean M. Lockyer, Ph.	\overline{x}	
Date 1/6/05	Reg. No.	54,111
C	ERTIFICATE OF TRANSMISSION	/MAILING

Signature	anne		
Typed or printed name	Anna C. Kundel	Date	01/06/2005

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Attorney Docket No.: 02307O-125630US Client Reference No.: SF 2002-071-2

Sommissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

on Jonuary 6, 2005

TOWNSEND and TOWNSEND and CREW LLP

By: Cull

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

HE et al.

Application No.: 10/678,639

Filed: October 3, 2003

For: METHODS FOR TREATING CANCER BY INHIBITING WNT

SIGNALING

Examiner: Not yet assigned

Art Unit: 1642

INFORMATION DISCLOSURE

STATEMENT UNDER 37 CFR §1.97 and

§1.98

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

The references cited on attached form PTO/SB/08A and PTO/SB/08B are being called to the attention of the Examiner. Copies of the references are enclosed. It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

Also enclosed is a copy of the Search/Examination report corresponding to the PCT application.

HE et al. PATENT

Application No.: 10/678,639

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As provided for by 37 CFR 1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

Applicant believes that <u>no fee is required</u> for submission of this statement. However, if a fee is required, the Commissioner is authorized to deduct such fee from the undersigned's Deposit Account No. 20-1430. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,

Jean M. Lockyer, Ph.

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Tel: 415-576-0200 Fax: 415-576-0300

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

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Sheet	1	of	3

	Complete if Known
Application Number	10/678,639
Filing Date	October 3, 2003
First Named Inventor	He, Biao
Art Unit	1642
Examiner Name	Not yet assigned
Attorney Docket Number	02307O-125630US

			U.S. PATENT DO	CUMENTS+	
		Document Number			
Examiner Initials*	Cite No.1	Number Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Winere Relevant Passages or Relevant Figures Appear
	AA	6,159,462	12-12-2000	Matthews et al.	
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•	FOREIGN PATENT DOCUMENTS							
Examiner Cite	Foreign Patent Document		Publication Date	Name of Patentee or	Pages, Columns, Lines, Where Relevant			
Initials*	No.1	Country Code ³	Number ⁴ Kind	1 Code ⁵ (if known)	MM-DD-YYYY	Applicant of Cited Passa	Passages or Relevant Figures Appear	ant T ⁶
	AB	wo	02/088081	A2	11-07-2002	The Regents of the University of California		
	AC	CA	2,200,794		09-24-1998	The Governing Council of the University of Toronto		

Examiner Signature	Date Considered		

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). Kind Codes of U.S. Patent Documents at www.uspto.gov or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449B/PTO Complete if Known 10/678,639 Application Number INFORMATION DISCLOSURE October 3, 2003 Filing Date STATEMENT BY APPLICANT First Named Inventor He, Biao Art Unit 1642 (use as many sheets as necessary) Examiner Name Not yet assigned 02307O-125630US Attorney Docket Number Sheet

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T 2
	AD	APPEL, J., et al., "Elucidation of Discontinuous Linear Determinants in Peptides," <u>The Journal of Immunology</u> , February 1990, pp. 976-983, Vol. 144, USA.	
	AE	BIENZ et al., "Linking Colorectal Cnacer to Wnt Signaling," Cell, 2000, pp. 311-320, Vol. 103, Cell Press	
	AF	BROWN et al., "Wnt signaling in breast cancer: have we come full circle?" <u>Breast Cancer Res.</u> 2001, pp. 351-355, Vol. 3	
	AG	CHEN et al., "Wnt-1 Signaling Inhibits Apoptosis by Activating β-Catenin/T Cell Factor-mediated Transcription," J Cell Biol, 2001, pp. 87-96, Vol. 152, No. 1, The Rockefeller University Press.	
	АН	COX et al., "A Screen for Mutations That Suppress the Phenotype of <i>Drosophila armadillo</i> , the β-Catenin Homolog," Genetics, 2000, pp. 1725-1740, Vol. 155.	
	AI	DE LA COSTE et al., "Somatic mutations of the β-catenin gene are frequent in mouse and human hepatocellular carcinomas," Proc Natl Acad Sci USA, 1998, pp. 8847-8851, Vol. 95.	
	AJ	FEDI et al., "Isolation and Biochemical Characterization of the Human Dkk-1 Homologue, a Novel Inhibitor of Mammalian Wnt Signaling," J Biol Chem, 1999, pp. 19465-19472, Vol. 274, No. 27.	
	AK	FINCH, P., "Purification and molecular cloning of a secreted, Frizzled-related antagonist of Wnt action," <u>Proc. Natl. Acad. Sci. USA</u> , June 1997, pp. 6770-6775, Vol. 94.	
	AL.	HE et al., "Identification of c-MYC as a Target of the APC Pathway," Science, 1998, pp. 1509-1512, Vol. 281.	
,	АМ	IOANNIDIS et al., "The β-catenin-TCF-1 pathway ensures CD4 ⁺ CD8 ⁺ thymocyte survival," Nat Immunol, 2001, pp.691-697, Vol. 2, No. 8.	
	AN	KATOH, et al., "WNT2B2 mRNA, Up-Regulated in Primary Gastric Cancer, Is a Positive Regulator of the WNT-β-Catenin-TCF Signaling Pathway," <u>Biochemical and Biophysical Research Communications</u> , 2001, pp. 1093-1098, Vol. 289, Elsevier Science.	
	AO	LACHER, M., et al., "Wnt-Frizzled signaling in cell proliferation and survival," Nature, 2001, 1 page, abstract only, [33]	
	AP	MATSUZAWA et al., "Siah-1, SIP, and Ebi Collaborate in a Novel Pathway for β-Catenin Degradation Linked to p53 Responses," Mol Cell, 2001, pp. 915-926, Vol. 7, Cell Press.	
	AQ	MELKONYAN et al., "SARPs: A family of secreted apoptosis-related proteins," Proc Natl Acad Sci USA, 1997, pp. 13636-13641, Vol. 94.	
	AR	MILLER et al., "Mechanism and function of signal transduction by the Wnt/β-catenin and Wnt/Ca ²⁺ pathways," Oncogene, 1999, pp. 7860-7872, No. 18, Stockton Press	
	AS	MOON et al., "Structurally Related Receptors and Antagonists Compete for Secreted Wnt Ligands," <u>Cell</u> , March 1997, pp. 725-728, Vol. 88, Cell Press.	

Examiner	Date	
Signature	Considered	

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	AT	NUSSE et al., "Making head or tail of Dickkopf," Nature, 2001, pp. 255-256, Vol. 411.	
	AU	ORFORD et al., "Exogenous Expression of β-Catenin Regulates Contact Inhibition, Anchorage-independent Growth, Anoikis, and Radiation-induced Cell Cycle Arrest," J Cell Biol, 1999, pp. 855-868, Vol. 146.	
	AV ,	POLAKIS et al., "Wnt signaling and cancer," Genes Dev, 2000, pp. 1837-1851, Vol. 14, Cold Spring Harbor Laboratory Press.	
	AW	RHEE, C-S., et al., "Wnt and frizzled receptors as potential targets for immunotherapy in head and neck squamous cell carcinomas," Oncogene, 2002, pp. 6598-6605, Vol. 21, Nature Publishing Group.	
	AX	REYA et al., "Wnt Signaling Regulates B Lymphocyte Proliferation through a LEF-1 Dependent Mechanism," Immunity, 2000, pp. 15-24, Vol. 13, Cell Press.	
	AY	SATOH et al., "AXIN1 mutations in hepatocellular carcinomas, and growth suppression in cancer cells by virus-mediated transfer of AXIN1," Nat Genet. 2000, pp. 245-250, Vol. 24.	
	ΑŻ	SHIN et al., "Intermolecular and Interdomain Interactions of a Dynamin-related GTP-binding Protein, Dnm1p/Vps1p-like Protein," <u>Journal of Biological Chemistry</u> , 1999, pp. 2780-2785 Vol. 274, USA.	
	ВА	SHOU et al., "Human Dkk-1, a gene encoding a Wnt antagonist, responds to DNA damage and its overexpression sensitizes brain tumor cells to apoptosis following alkylation damage of DNA," Oncogene, 2002, pp. 878-889, Vol. 21, Nature Publishing Group.	
	ВВ	SUZUKI et al., "A genomic screen for genes upregulated by demethylation and histone deacetylase inhibition in human colorectal cancer," Nat Genet, 2002, pp. 141-149, Vol. 31.	
	вс	TAIPALE, J., et al., "The Hedgehog and Wnt signaling pathways in cancer," Nature, May 2001, pp. 349-354, Vol. 411, Macmillan Magazines Ltd.	
	BD	TICE, D., et al., "Syngergistic Induction of Tumor Antigens by Wnt-1 Signaling and Retinoic Acid Revealed by Gene Expression Profiling," <u>The Journal of Biological Chemistry</u> , April 2002, pp. 14329-35, Vol. 277, No. 16, USA.	
	BE	YOU et al., "Wnt signaling promotes oncogenic transformation by inhibiting c-Myc-incuded apoptosis," <u>J Cell Biol</u> , 2002, pp. 429-440, Vol. 157, The Rockefeller University Press.	
	BF	UTHOFF et al., "Wingless-Type Frizzled Protein Receptor Signaling and Its Putative Role in Human Colon Cancer," Mol Carcinog, 2001, pp. 56-62, Vol. 31, Wiley-Liss, Inc.	
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Signature	,	Considered	

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